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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,661	10/23/2001	James J. Alwan	AIRFIBE.004CPI	2453

7590 10/17/2005
TECHNOLOGY, PATENTS & LICENSING, INC.
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EXAMINER

TRAN, DZUNG D

ART UNIT PAPER NUMBER

2638

DATE MAILED: 10/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/045,661

Applicant(s)

ALWAN ET AL.

Examiner

Dzung D Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 October 2001.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 1-4, 7, 8, 11-22 and 30-45 is/are allowed.
6) ☒ Claim(s) 23 and 29 is/are rejected.
7) ☒ Claim(s) 25-28 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Traa
U.S. patent no. 6,222,660

Regarding claim 23, Traa discloses a system configured for controlling incoming laser power in a communication system which includes a first node and a second node where the second node transmits a communication beam to the first node, the system comprising:

a first node having a photodiode detector 10 (col. 2, line 40) configured to receive an incoming communication beam (see figure 1);

a first optical attenuator 26 (col. 2, line 59) coupled to the first node and configured to attenuate the incoming communication beam prior to it reaching the photodiode detector 10 (see figure 1);

a second node configured to transmit the incoming communication beam(e.g. the first node includes optical signal source 24 for transmitting the communication beam);
and

a first attenuation control module (e.g. controller 18, col. 2, line 65) configured to control the first optical attenuator to maintain a power level of the incoming communication beam to within an operational range of the photodiode detector (col. 2, line 65-67). Traa differs from claim 23 of the present invention in that Traa does not specifically disclose wherein the first attenuation control is configured to disable and enable the first attenuator to keep the power level of the incoming communication beam to within the operational range of the photodiode detector. However, Traa discloses in col. 3, lines 1-6, the obtaining an optimum bias voltage for the APD by controlling the attenuator base on a family of constant optical power level curves are generated (see figure 2), with each optical power level being determined by the programmable optical attenuator 26 in response to the attenuation command from the controller 18 (equivalent to first attenuation control) is configured to disable (e.g. decrease the attenuation level to minimum) and enable (e.g. increase the attenuation level to maximum) the first optical attenuator to keep the power level of the incoming communication beam to within the operational range of the photodiode detector. Therefore, if it is not inherently, it would have been obvious to an artisan of ordinary skill in the art to set the attenuation level of the programmable optical attenuator 26 to minimum level in order to disable or set the attenuation level of the programmable optical attenuator 26 to maximum level in order to enable the first optical attenuator to keep the power level of the incoming communication beam to within the operational range of the photodiode detector.

3. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Javitt et al. U.S. patent no. 6,381,055 in view of Traa U.S. patent no. 6,222,660.

Regarding claim 29, Javitt discloses a two ways communication system comprising at least two nodes (see figure 5) in that each node having transceiver 315, 325 (including a transmitter and a receiver) and a retro-reflector 321 for reflecting the incoming communication beam 311 to form an outgoing communication beam 312 (see col. 9, lines 5-7), a first node having transceiver 315 including a photodiode detector configured to receive an incoming communication beam (see figure 5A); a second node having transceiver 325 including a transmitter configured to transmit the incoming communication beam. Javitt differs from claim 29 of the present invention in that he does not disclose the transceiver 315, 325 includes a receiver having an optical attenuator coupled to the nodes and configured to attenuate the incoming communication beam prior to it reaching the photodiode detector. Traa discloses a system configured for controlling incoming laser power in a communication system comprising:

an optical attenuator 26 (col. 2, line 59) coupled to the node and configured to attenuate the incoming communication beam prior to it reaching the photodiode detector 10 (see figure 1); and

an attenuation control module (e.g. controller 18, col. 2, line 65) configured to control the first optical attenuator to maintain a power level of the incoming communication beam to within an operational range of the photodiode detector (col. 2,

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line 65-67). At the time of the invention was made, it would have been obvious to an artisan to incorporate the receiver having an optical attenuator and an attenuation control module taught by Traa in the system of Javitt. One of ordinary skill in the art would have been motivated to do this in order to attenuate the incoming communication beam prior to it reaching the photodiode detector to obtain an optical digital data application an envelope as a function of optical power levels within which a bit error rate for the optical digital data is zero (col. 3, lines 26-30).

4. Claims 25-28 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Claims 1-4, 7, 8, 11-22, and 30-45 are allowed.

Response to Arguments

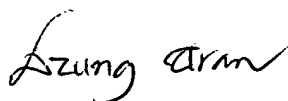
6. Applicant's arguments with respect to claims 23 and 29 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Dzung Tran
10/13/2005